

REMARKS

Claim 1 was rejected under Section 103 over the single reference to Gonzalez. Certainly the propriety of a single reference Section 103 rejection is doubtful. In order to make out a *prima facie* rejection, it is necessary to show the elements of the claims, or, if one or more of those elements are missing, a rationale from within the art to modify the reference to meet those elements. Here the inference cannot teach modifying itself.

It is difficult to understand how Gonzalez can meet those elements. Namely, Gonzalez shows (in the prior art) a layer 4 which apparently breaks down. However, Gonzalez's invention has nothing to do with that. As explained in column 2, lines 28-31, Gonzalez believes that such a layer is undesirable. Gonzalez goes ahead and proposes a structure, that is shown in Figure 15, in which an upper electrode 230 overlies the chalcogenide 220 and the lower electrode 205. Plainly, Gonzalez's solution is to remove the breakdown layer 4.

Thus, it is apparently conceded that Gonzalez does not teach controlling the location of the breakdown layer. The breakdown could occur anywhere between the chalcogenide and the lower electrode.

As amended, the claim specifies that the breakdown region within the pore is what is manipulated. In other words, something has to be done to change where the breakdown occurs within the pore itself. Plainly, the pore shown in Figure 1 of the cited Gonzalez reference is the downwardly protruding portion near the reference 7. Gonzalez does nothing to control where along the length of that layer in the pore the breakdown occurs. He simply lets it happen where it will. The citations to other portions of Gonzalez do not seem applicable since those portions all go to embodiments which do not use any such breakdown layer at all, Gonzalez having decided that a breakdown layer is undesirable.

Thus, Gonzalez simply teaches letting the breakdown occur (in the prior art) wherever it might occur. The claim calls for engineering the location of the breakdown within the pore itself. Thus, it is not believed that a reading of the claim that suggests that causing the breakdown to occur anywhere in the pore is sufficient to meet the claim limitation, as amended.

Therefore, reconsideration of the rejection of claim 1 is respectfully requested.

Claim 23 has been amended to call for damaging one region so that it will breakdown and not damage another region. It is believed that as amended, the claim distinguishes over Gonzalez which does not do any kind of damaging.

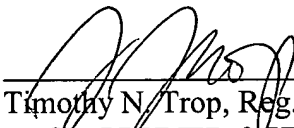
In other words, Gonzalez does nothing to cause the breakdowns to occur in one region relative to another region and, specifically, he does nothing to damage one region relative to another region to change the likelihood of where the breakdown would occur. Instead, Gonzalez just allows the breakdown to occur where it might occur.

Claim 26 should be allowable for the same reason described with respect to claim 23.

In view of these remarks, reconsideration is respectfully requested.

Respectfully submitted,

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